What is claimed is:

1. A stereo-observation system comprising:

a stereo imaging unit having at least two entrance pupils and imaging means forming a first image for the left eye and a second image for the right eye which have parallax; and

a stereo display unit having two image display means displaying two images formed by the stereo imaging unit,

wherein the stereo display unit is constructed so that an angle of vergence $\alpha 2$ is made by a line of sight of a left eye of an observer viewing a center of the first image displayed by the image display means with a line of sight of a right eye of the observer viewing a center of the second image displayed by the image display means, and the angle of vergence $\alpha 2$ satisfies the following condition:

$$(\alpha 1 - 2 \tan^{-1} (d / 2L)) \times (w2 / w1) \times 0.83 \leq \alpha 2 \leq \{2 \sin^{-1} (G / 2D) - (2 \tan^{-1} (d / 2S) - \alpha 1) \times (w2 / w1)\} \times 1.2$$

where $\alpha 1$ is an angle of vergence (an inward angle) of the stereo imaging unit, d is a distance between centers of the two entrance pupils of the stereo imaging unit, L is a distance from a far point of a depth of field of the stereo imaging unit to the entrance pupils of the stereo imaging unit, S is a distance from a near point of the depth of field of the stereo imaging unit to the entrance pupils of the stereo imaging unit, w1 is a field angle of the stereo imaging unit, w2 is a field angle of the stereo display unit, G is an interpupillary distance of the observer, and D is a distance from a pupil position of the observer to an observation image.

2. A stereo-observation system according to claim 1, further satisfying the following condition:

$$0.7 \leq \alpha 1 / \alpha 2 \leq 1.7$$

3. A stereo-observation system according to claim 1 or 2, wherein the stereo imaging unit has the depth of field at least 10 times the distance between the centers of the two entrance pupils.